# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Group 27\*

HTS number(s) covering the product requested for exclusion: 7228100010

Detailed description of product requested for exclusion (please do not only refer to the model number):

High Speed Steel in the form of Peeled and Polished bar. AISI Grades: M1, M2, M7, M35, M42, M50, MatrixII, M3 Type 2, M42 Modified, M52FM, Vascodyne

- 1) Reasons For Exclusion: There is limited capacity in the United States to produce this product due to the fact that Allegheny/Teledyne Allvac sold its plant and does not produce these grades any longer. In addition, the equipment used to produce these products by importers offers an improved surface quality. An in-line peeting and polishing process is a cost effective and efficient alternative to the traditional centerless grinding offered by the only US producer. (offering customers 5-10% cost savings)
- 2) <u>Competition</u>: [] does not offer this technology, our [] competitor [] has this capability and our [] competitor [] does not.
- Global Competition: Only a limited number of global suppliers are approved/specified suppliers of these products. These include [].
- 4) <u>Substitute products:</u> The AISI designations referenced above are specified by customers for specific characteristic relating to product performance. There are no substitute products.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Group 27\*

HTS number(s) covering the product requested for exclusion: 7224100075

Detailed description of product requested for exclusion (please do not only refer to the model number):

High Speed Steel in the form of Billet: AISI Grades: M1, M2, M7, M35, M42, M50, MatrixII, M3 Type 2, M42 Modified, M52FM, Vascodyne

- Reasons For Exclusion: There is limited capacity in the United States to produce this
  product due to the fact that Allegheny/Teledyne Allvac sold its plant and does not
  produce these grades any longer. In addition, these billets are re-rolled in the United
  States and further processed into finished coils and bars to customer specifications.
- Global Competition: Only a limited number of global suppliers are approved/specified suppliers of these products. These include [ ].
- Substitute products: The AISI designations referenced above are specified by customers for specific characteristic relating to product performance. There are no substitute products.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Group 27\*

HTS number(s) covering the product requested for exclusion: 7227100000

Detailed description of product requested for exclusion (please do not only refer to the model number):

High Speed Steel in the form of Hot Rolled Coil. AISI Grades: M1, M2, M7, M35, M42, M50, MatrixII, M3 Type 2, M42 Modified, M52FM, Vascodyne

1) Reasons For Exclusion: There is limited capacity in the United States to produce this product due to the fact that Allegheny/Teledyne Allvac sold its plant and does not produce these grades any longer. In addition, this Hot Rolled Coil in a sizes 5.0mm and below, offers a unique selling advantage over United States producers. These materials in sizes 5.0mm, 4.05mm, 3.3mm and 2.7mm offer efficiency and cost savings advantages for our customers. (up to 20% cost savings) Significant investment and unique rolling mills offer the United States an imported product that is not available from the US producer.

HSS Hot Rolled Coil is typically further processed via cold drawing. Compared to US supplies, that are only available in 5,5 mm, the smaller sizes save several drawing and annealing operations (up to 20% savings), thus provide a significant better economy in the total process. These imports are globally the only supplier of HSS Hot Rolled Coil under dia 5,5 mm.

Additionally, our High Speed Steel Hot Rolled Coil in the full size range from 2.7mm to 20mm offers quality improvements in terms of roundness, surface condition and tolerance that is unmatched by our competitor in the United States. US Producers are only able to guarantee this roundness and these tolerances through an additional cold drawing operation which is not necessary with this product, thus establishing better efficiencies (5-10% cost savings)

Global Competition: Only a limited number of global suppliers are approved/specified suppliers of these products. The main US competitor has not invested in rolling mill improvements and consequently their product quality, surface finish and tolerance requires its customers to shave and/or pre-draw their hot rolled coil to satisfy the market requirements. The foreign competitors also do not offer this product in the dimensions and conditions referenced above. The Hot Rolled Coil from all of these producers are only offered in sizes of 5.5mm and above.

 Substitute products: The AISI designations referenced above are specified by customers for specific characteristic relating to product performance. There are no substitute products.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Groups 9 and 27\*

HTS number(s) covering the product requested for exclusion: 7228400000, 7228401090, 7226911560

Detailed description of product requested for exclusion (please do not only refer to the model number):

AISI P20 Tool Steel Plate over 150mm

Chemical Analysis (%): C 0.37 Si 0.30 Mn 1.40 Cr 2.00 Ni 1.00 Mo 0.20 S<0.010

# 1) Basis for Exclusion

There is only limited US production capability for this product. AISI P20 supplied in a hardened and tempered condition offers excellent polishing and photo-etching properties. This product is suitable for a wide range of injection molds, blow molds and extrusion dies. Due to quality problems with US producers, and by request from customers, this product is imported to the US.

# 2) Competition

[] produce similar products in the US.

### STEEL, Inv. No. TA-201-73

# A. EXCLUSION REQUEST DATA SHEET \*ITC Product Group 27\*

HTS number(s) covering the product requested for exclusion: 7225.40.50.60 fat roled products of a width of 600mm or more and a discussion less than 4.75 mm.

Detailed description of product requested for exclusion (please do not only refer to the model number):

Tool Steel Sheet with a thickness of less than 4.75mm and a width of 600mm or more.

AISI Standard: AISI Standard:

D2 A7

A2 420

Ol D7 Powder Met.

H13 no std. - Chem. Analysis: C 1.15/Si 1.00/ Cr 8.50/ Mo 1.50/ V 2.00/ W 1.50

**S7** 

A6

All grades with Cross Rolling Technology, annealed, pre-machined or fine ground

# 1) Basis for Exclusion

There is no US producer that can manufacture the above grades with a thickness less than 4.75mm and a width over 600mm.

### 2) Competition

There is no US producer that can manufacture the above grades with a thickness less than 4.75mm and a width over 600mm. There are no substitutes for this product.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Group 27\*

HTS number(s) covering the product requested for exclusion:

7225.40.50.60 Bat rolled products of a width of 600mm or more and a thickness of 4.75mm or more 7226.91.15.60 flat rolled products of a width of 300mm or under 600mm wide

Detailed description of product requested for exclusion (please do not only refer to the model number):

Flat rolled products of a width of 600mm or more and a thickness of 4.75 or more and flat rolled products of a width of 300mm or under 600mm. All grades with Cross Rolling Technology, annealed, pre-machined or fine ground.

AISI Standard:

AJSI Standard:

D2

A7 modified

A2

420

01

D7 powder met.

H13

no std.

Chem. Analysis: C 1.15 / Si 1.00/ Cr 8.50/ Mo 1.50/ V 2.00/ W 1.50

**\$7** 

A6

# 1) Basis for Exclusion

There is no US producer that offers this trademarked technology (cross-rolling), which offers strong economic advantages to the customers. (See ITC hearing testimony of Jack Milholan)

# 2) Competition

There is no known US producer that utilizes this trademarked technology of production.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Groups 9 and 27\*

HTS number(s) covering the product requested for exclusion: 7225.40.10.90, 7226.91.15.60, 7226.91.25.60, 7228.30.60.00, 7228.40.00.00, 7228.50.10.20, 7228.50.10.60

Detailed description of product requested for exclusion (please do not only refer to the model number):

### AISI H-13 ESR and VAR

Chemical Analysis (approx. %): C Si Мn \$ Cr. Mo N 0,37 0,90 Min 0,30 max max 5,00 1.25 0.90 max 0,41 1,20 0,50 0,025 0,003 5,30 1,50 0,40 1,00

# 1) Basis for Exclusion

Only foreign produced AISI H-13 ESR hot work tool steel are approved by GM and Ford for die casting. This product is specially modified to meet stringent technical demands of die casters worldwide. The producer is typically specified by the final customer (GM, Ford and other auto manufacturers). These and other die casting companies require premium hot work tool steels fulfilling the following internal specifications:

- DC-9999-1 (FORD)
- o AMTD-DC2010 (GM)
  - NADCA 207-97

The requested AISI H-13 ESR material fulfills a 10 ft-tb. Charpy V impact toughness level. The requested AISI H-13 VAR material fulfills a 14 ft-lb. Charpy V impact toughness level. There is insufficient ESR capacity in the US that is utilized for the manufacture of tool steel.

### 2) Competition

[] have the capability to produce this product, but to our knowledge, none of them focus their production on this product. Due to the customer specifications, there are no substitutes for this product. Customers pay premium prices for these products that meet the stringent industry requirements.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Group 25\*

HTS number(s) covering the product requested for exclusion: 7222300000 7219210020 7222190050 7220110000 7222200075 7222200045 7222110050

Detailed description of product requested for exclusion (please do not only refer to the model number):

AISI 420 modified stainless grade - Electro Slag Remelt (ESR) for Plastic Molding

Typical analysis %: C 0.38 Si 0.90 Mn 0.50 Cr 13.60 V 0.30

Through-hardening mold steel with very good wear and corrosion resistance and excellent Polishability.

## 1) Basis for Exclusion

There is insufficient ESR capacity in the US to supply the market. This ESR steel is utilized for very high demand on cleanliness when it comes to polishing of high quality plastic molds.

# 2) Competition

[] may produce this material, but it is believed that it is small quantities. There are no substitutes for this product.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Group 27\*

HTS number(s) covering the product requested for exclusion: 7226910500, 7228304000

Detailed description of product requested for exclusion (please do not only refer to the model number):

## Chipper knife steel - AISI A-8

Chemical Analisis (%):

		,	,-							
	¢	Si	Mn	P	S	C <sub>t</sub>	Mo	Ni	V	W
Min	0,48	0,75	0,20	пах.	max.	7,25	1,25	max.	0,35	max,
Max	0,55	1,05	0,50	0,030	0,030	8,40	1,60	0,40	0,50	0,30

# 1) Basis for Exclusion

To our knowledge, no US producer manufactures flat rolled, Chipper knife bars. This material is used for the manufacturing of industrial knives for the wood and steel processing industries. The main demand is in bar form with precise size tolerances to ensure economic benefits when manufacturing the final product (industrial knives).

# 2) Competition

The North American chipper knife industry faces fierce competition from imports of foreign-made chipper knives. The US market historically has not fulfilled demand for this product and offshore suppliers are necessary.

# 3) Consumption

Chipper knife steel represents only a very small share of US consumption (below 5%) of the generic tool steel product group. It also represents less than 10% of the total US imports of tool steel. Chipper knife steel has previously been excluded from quotas on tool steel due to its necessity to the US industry. This product is duty-free. There is no substitute for this product.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Group 27\*

HTS number(s) covering the product requested for exclusion; 7228306000, 7228501060

Detailed description of product requested for exclusion (please do not only refer to the model number):

# Premium Cold Work Tool Steel (ESR remelted)

Chemical Analisis (%):

	C	Si	Mu	₽	S	Сг	Mo	V	Al
Min	1,05	0,80	0,35	max.	max.	8,00	2,00	0,40	1,00
							2,20		

f) Basis for Exclusion This product holds US patent # 5,160,553 and is a cold work tool steel designed for stamping, cutting and forming applications. The outstanding toughness and high compression strength gives this product a wide range of applications where chipping or premature wear of "traditional" tool steel grades such as AISI A2, S7, D2, etc. is a problem. There is only one company that can manufacture steel with Aluminum content over 1% (a European company).

There is limited ESR capacity in the US that is utilized in the manufacture of tool steel.

2) Competition As this is a patented product, there is no US manufacturer of this tool steel. Substitutes are AISI A2, S7, D2, etc., but this product offers a more cost effective alternative for cold work tool steel applications.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Group 27\*

HTS number(s) covering the product requested for exclusion:
7225.20.0000, 7226.20.0000, 7225405060, 7225401090, 7226911560
Tool and high speed steels are produced in various product forms consequently appear under various HTS numbers

Detailed description of product requested for exclusion (please do not only refer to the model number):

High Speed Steel Sheets and plates produced by Cross-Rolling Technology. Annealed and shot peeued.

AISI Standard:

M2

M42

M4 (Powder Metal)

No Std.

Chem. Analysis %: C 1.35/ Cr 3.80/ Mo 5.00/ V 3.80/ W 5.50

No Std.

Chem. Analysis %: C 1.30/ Cr 4.20/ M0 5.00/ V 3.00/ W 6.30

# 1) Basis for Exclusion

According to our knowledge, there is no US producer that manufactures the above high speed steel grades in sheet and plate form.

# 2) Competition

According to our knowledge, there is no US producer that manufactures the above high speed steel grades in sheet and plate form.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Groups 9 and 27\*

HTS number(s) covering the product requested for exclusion: 7225.40.10.90, 7226.91.15.60, 7226.91.25.60, 7228.30.60.00, 7228.40.00.00, 7228.50.10.20, 7228.50.10.60

Detailed description of product requested for exclusion (please do not only refer to the model number):

Hot Work Tool Steel ESR remelted (approx. DIN 1.2885)

Chemical Analisis (%):

Ī	С	Şi	Mn	P	S	Cr	Mo	Nī	v	Co
Min	0,36	0,20	0,25			2,70	2,70		0.60	2.70
Max	0,42	0,35	0,40	0,025	0,005	3,00	2,90	0,40	0,70	3.00

This steel is mainly used under high stress conditions and processing of heavy alloys, such as mandrels, dies and containers for metal tube and rod extrusion, tools for manufacturing screws, nuts, bolts and forming dies. This product is recommended by machine builders worldwide for their tooling applications.

# 1) Basis for Exclusion

This hot work tool steel exhibits fine heat checking resistance, superior tensile strength and good impact properties; admits water cooling. Cobalt enables the steel to perform under high duty conditions.

There is insufficient ESR capacity in the US that is utilized for the manufacture of tool steel.

# 2) Competition

[] may have the ability to produce a similar material. Substitutes for this product may include other hot work tool steels, but due to its technical properties, this product is superior for its applications.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Groups 9 and 27\*

HTS number(s) covering the product requested for exclusion: 7225.40.10.90, 7226.91.15.60, 7226.91.25.60, 7228.30.60.00, 7228.40.00.00, 7228.50.10.20, 7228.50.10.60

Detailed description of product requested for exclusion (please do not only refer to the model number):

Premium modified hot work tool steel. US Patented.

Chemical composition (%): C 0.35 Si 0.2 Mn 0.5 Cr 5.0 Mo 2.3 V 0.6 S max 0.001

The secret behind the unique manufacturing process and the good properties of the steel are as follows:

Selected raw materials and slag former for the process

 Strict control of the chemical composition from the beginning of the process special melting and remelting processes which allows for very low impurity levels in the steel

Improved solidification structure and a homogeneous structure

Special heat treatment and forging procedures and in the end of the production process

Special testing procedure according to different specifications

This product offers a longer tool life and a lower production cost compared with H13 material not only in die casting application but also in other hot work application like hot forging and extrusion.

- 1) Basis for Exclusion US patented hot work tool steel with minimum Charpy V impact test value of 14 ft-lbs. for severe conditions in die casting. ESR melted. There is limited ESR capacity utilization for the production of tool steel. Fulfills well above GM and Ford specifications. These and other die casting companies require premium hot work tool steels fulfilling the following internal specifications:
  - o DC-9999-1 (FORD)
  - o AMTD-DC2010 (GM)
    - NADCA 207-97

There is insufficient ESR capacity in the US that is utilized for the manufacture of tool steel.

 Competition No US producer of this product. No US producer meets approval of GM and Ford specifications for die casting. Since this is a US Patented product, there is no substitute for this product.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Groups 9 and 27\*

HTS number(s) covering the product requested for exclusion: 7225.40.10.90, 7226.91.15.60, 7226.91.25.60, 7228.30.60.00, 7228.40.00.00, 7228.50.10.20, 7228.50.10.60

Detailed description of product requested for exclusion (please do not only refer to the model number):

# Premium Hot Work Tool Steel (ESR remelted)

## Chemical Analisis (%):

	C	Si	Mn	P	S	Cr	Mo	Ni	v	A1
Min	0,36	0,80	0,30	max.	max.	4,80	1,20	max.	0.40	0.90
Max	0,41	1,00	0,50	0,015	0,003	5,20	1,40	0,40	0.50	1.10

# 1) Basis for Exclusion

Only producer can manufacture steel with an aluminum content over 1% (a European company). This premium hot work tool steel exhibits fine heat checking resistance, superior tensile strength and good impact properties. It allows for water cooling and the aluminum gives the steel special properties with respect to nitriding and hardness. It is utilized in the aluminum extrusion and forging applications.

There is insufficient ESR capacity in the US that is utilized for the manufacture of tool steel.

# 2) Competition

There is no production of this material in the US. Substitutes for this product are other hot work tool steels, but due to the special properties of this product, it is a more cost effective alternative for the customer.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Groups 9 and 27\*

HTS number(s) covering the product requested for exclusion: 7225.40.10.90, 7226.91.15.60, 7226.91.25.60, 7228.30.60.00, 7228.40.00.00, 7228.50.10.20, 7228.50.10.60

Detailed description of product requested for exclusion (please do not only refer to the model number):

Premium Hot Work Tool Steel (ESR remelted)

Chemical composition: (%): C 0.38 Si 0.3 Mn 0.75 Cr 2.6 Mo 2.3 V 0.9 S max 0.003

1) Basis for Exclusion This product hold US patent # 4459162 due to its chemical composition and quality. The concept for the high temperature range die steel is based on both the steel making process as well as the optimizing of the chemical composition. The optimization of the chemical composition of this product has lead to a higher hot yield strength, better temper resistance and higher thermal conductivity compared to AISI H-13.

The secret behind the unique manufacturing process and the good properties of the steel are as follows:

Selected raw materials and slag former for the process

- Strict control of the chemical composition at the beginning of the special melting and remelting processes
- Very low impurity levels in the steel
- Improved solidification structure and a homogeneous structure
- Special heat treatment and forging procedures and in the end of the process
- Special testing procedure according to different specifications

This product offers a longer tool life and a lower production cost not only in die casting application but also in other hot work application like hot forging and extrusion.

There is insufficient ESR capacity in the US that is utilized for the manufacture of tool steel.

Competition There is no production of this material in the US due to its patent. As this
is a US patented product, there is no substitute.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Group 9 and 27\*

HTS number(s) covering the product requested for exclusion: 7228703060, 7228703080, 7228306000

Detailed description of product requested for exclusion (please do not only refer to the model number):

AJSI 4150, AISI A-8 manufactured into special sections or profiles (shapes) utilized for a specific purpose, such as tooling for press brakes and the woodworking industry.

### **AIST 4150**

Chemical Analisis (approx %)	l: C	Sī	Mn	Cr	Mo
Min	0,47	0,15	0,65	0,75	0,15
Max	0,54	0.35	1.10	1.20	0.25

# AISI A-8 Chemical Analisis (%):

	C	Si	Min	Þ	Ş	Cr	Mo	Ni	٧	w
Min	0,48	0,75	0,20	max.	max.	7,25	1,25	max.	0.35	max.
Max	0,55	1,05	0,50	0,030	0,030	8,40	1,60	0,40	0,50	0.30

## 1) Basis for Exclusion

No US Producer is willing to supply the required small production lots (approx. 1 ton). US producers require lot sizes of 50 tons or more (AISI 4150). No US supplier meets the close tolerances necessary for the customer to stay competitive in an international market. Importer has received notice that [] supports this exclusion request ([]] sent a letter to the ITC regarding this exclusion request).

# 2) Competition

This product may be substituted with bars, machined to the requested profile shapes at significantly higher cost. The profile alternative offers customers significant cost savings in machining costs and improved lead times for the product. US producers who may offer a similar product are [], but there is no commitment from these companies for the small lot sizes necessary for tool steel and similar applications.

# STEEL, Inv. No. TA-201-73 EXCLUSION REQUEST DATA SHEET \*ITC Product Group 25\*

HTS number(s) covering the product requested for exclusion: 7220110000, 7222190050, 7222190005 7222300000, 7222110050, 7222110005

Detailed description of product requested for exclusion (please do not only refer to the model number):

Rolled or forged bars of different ESR/VAR remelted stainless steel grades and Nickel Alloys (see enclosure 1 for chemical analysis) in black or peeled condition, according to following specifications:

customer specifications: GE B50 A951, GE B50 A790, GE B50 A365, WH 10705 BL, GE B50A789, GE B50A809, GE B50A305, GE B50A651, BMS 7-351, B50A947, 10705B2/BR/B4, 10707Z2, 10705AJ, 10705AT/BC, 10705GE

standards: AISI 422, AMS 5662, AMS 5898, AMS 5719, AMS 5889

In these specifications the production route is determined and the metallurgical properties e.g. cleanliness, range of hardness, range of mechanical properties etc., are defined. It generally takes about 1 to 2 years to become approved as a supplier for this material, which makes it very difficult to be substituted.

# 1) Basis for Exclusion

Due to the large and fluctuating demand in the power generation business and aircraft business, the US-steel and specialty material producers continue to increase their remelting capacity constantly and are not capable to keep up with the demand. Lead times from 12 to 14 month are normal for the time being. As a consequence the US-power generation and the aircraft business suffer disadvantages. Restrictions of this product from European sources would lead to a loss of manufacturing jobs in the US.

There is insufficient ESR capacity in the US that is utilized for the manufacture of tool steel.

# 2) Competition

Only a limited number of suppliers are approved/specified suppliers. Domestic suppliers include []. There are no substitutes for these products.

### 3) Consumption

Consumption of VAR/ESR remelted long products represent only a small share (< 5 %) of the total consumption of the total generic product group. Imports of VAR/ESR remelted long products represent only a small share (<5%) of the imports of the total generic product group.

# EXCLUSION REQUEST DATA SHEET

# PUBLIC VERSION

Enclosure I: Chemical analysis of grades requested for exclusion:

Ceneric Grade	Customer specification	v	25	Min	៦	₹	×	>	*	đ	å	F	₹	ź
A1ST 422	GE 350 A95110205 B243R/B4	0.23	0.35	6,0	11.6	1.0	0.7\$	0.25	1.0	mex 0.15	max 0.15	Keur O.O.	0.025	17183, 0.05
AMS \$719	GU 139 A948	0.12	0.2	8'0	4'11	1.7	2.7	0.3	m&x 0,1	118X 0,25	1111X 0.20	0.05	mail. 0.025	3716X (), ()
403 CB	(1)! H\$0 A790	0,14	0.35	5''0	12.0	0,20	0.5	0.08	į	muX 0.20			\$20'0 Xuus	91.0
403 0+	(19, 1150 A.165 1070522	0.17	0.35	0.7	l'II	9.0	0.55	6.3						0,3
	ØE D\$0∧789	0.04	0.40	0.65	14.5	7.0	6.5	100 O.10		\$"1		:	778.X 0.03	
868\$ SWV		06,0	08'0	05.0	00'91	0''1								
17-4 214	WH 10705 BL 10705 GH	0,04	0,25	0,4	15,4		p.4			3.3				23
15-5 PH AMS \$689	188-7-3MB	60.0	00'0	0.75	14.5		\$			3,3				
AMS 5662	OF 050A809 CSQTF103H04 P1T623/74	0.03	тик 0.35	тах 0.20	0.61	۲.	53.0			mex 0,10	1,00	0.95	0.55	5,3
IN 90 I	QE B50A305	0.04	mux 0.40	mux 0.50	12.5	\$,K	42.5					3.0		
307 VI	1507059 35				10.0	:	41,5					9'1	0,2	2,5
None	D50A947	0,14	0.35	0.7	\$11	Max 0,20	5.0		Max 0.1			Mux 0,05	Max 0,025	
None	1925 ATMC	0,13	6,3	0,5	8,11	6,6								
Mond	TLV 923801	0.21	0.35	0.5	13.3									
None	J.L.V 924806	0,22	0,25	0.7	11,4	\$6'0	0,7	6,9						
					· <b>-</b> -									
													ĺ	

# PUBLIC VERSION NON-CONFIDENTIAL

# KIND & CO. EDELSTAHLWERK

Requests To Exclude Certain Tool Steel Products From Import Relief Under

1.) Concern: CR7V-L

Information as required by the TPSC, published in the Federal Register / Vol. 66, No. 208 / October 26, 2001

a) Commercial name: CR7V-L

HTS number: 72 28 40 10

# b) Physical characteristics;

Chemical composition (wide range)

C	0,35	0,55
Si	0,20	1,20
Mn	0,30	1,00
Cr	6,00	8,00
Mo	1,00	2,00
V	0,50	1,50

plus defined trace elements

The detailed analysis is confidential know-how of KIND & Co. Edelstahlwerk.

CR7V-L is a tool steel grade for hot working, especially developed by KIND & CO for high demands of the forging industry in Germany. Its main properties show high values of wear resistance at high tensile strength.

CR7V-L has to be produced with special requirements on melting, on the forging process and on several heat treating processes, which are the know-how of KIND

Dimensions: max. 850 mm ø, 800 mm square, flat max. 1.300 x 500 mm

Surface quality: rough or premachined

# c) Basis for Exclusion Request

The main customer of KIND & CO. Edelstahlwerk in the United States has been the crank forging plant of Ford Motor Company at Woodhaven. This plant was founded in 1996 with a German forging unit. Since this time KIND & CO. Edelstaintwerk supplies CR7V-L to this plant. We did not compete with any other US-producer.

Later on, European competitors and U.S. Steel producers supplied material of other grades for this application for tests to Ford. As a result of these tests CR7V-L performed better and Ford denied a substitute by other steel grades in spite of the cheaper price of usual die steel grades.

# d) Other producers:

There are no other manufacturers of this grade.

# e) Total U.S. annual consumption:

Year	quantity
1996	40 short tons
1997	100 short tons
1998	50 short tons
1999	40 short tons
2000	70 short tons
projected:	
2001	70 short tons
2002	80 short tons
2003	80 short tons
2004	80 short tons
2005	80 short tons

# f) Total U.S. production:

1996	)	
1997		
1998	· እ	none
1999		
2000	)	

# g) U.S.-produced substitute:

As to the specific characteristics of CR7V-L there is no substitute.

# KIND & CO. EDELSTAHLWERK

Requests To Exclude Certain Tool Steel Products From Import Relief Under Section 203 To The TPSC

2.) Concern: TQ 1

Information as required by the TPSC, published in the Federal Register / Vol. 66, No. 208 / October 26, 2001

h) Commercial name: TQ 1

HTS number: 72 28 40 10

i) Physical characteristics:

Chemical composition (wide range)

С	0,30	0,45
\$i	0,10	0,50
Mn	0,20	0,80
Cr	4,50	6,00
Mo	1,50	2,50
V	0,40	1,00

with limited levels of defined trace elements

The detailed analysis is confidential know-how of KIND & Co. Edelstahlwerk.

TQ 1 is a premium hot work tool steel for die casting, especially developed by KIND & CO. Edelstahlwerk for special demands of aluminium die casting plants. TQ 1 shows a high level of thermal fatigue resistance combined with a highest level of toughness at high temperature strength.

TQ 1 is based on a very specific manufacturing expertise concerning the ESR or VAR remelting, the forging steps and special heat treating processes, which are know-how of KIND & CO. Edelstahlwerk.

Dimensions: max. 850 mm ø, 800 mm square, flat max. 1,300 x 500 mm

Surface quality: rough or premachined

j) Basis for Exclusion Request

The main customers in the United States are major automobile manufacturers such as Ford and GM, which require hot working tool steels fulfilling internal specifications for die casting

Ford: AMTD-DC 2010

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GM: DC-9999-1

Tests at GM and Ford Motor Company have shown clearly that the grade TQ 1 has advantages compared to other hot working tool steels. Also the tests at Case Western Reserve University / Cleveland, OH confirmed these results.

# k) Other producers:

There are no other manufacturers of this grade.

# f) Total U.S. annual consumption:

Year	quantity
1996	0
2006	0
2007	0
2008	0
2009	3 short tons
projected:	
2010	3 short tens
2011	10 short tons
2012	30 short tons
2013	30 short tons
2014	30 short tons

# m) Total U.S. production:

1996 1997	)	
1998	}	none
1999	- 1	
2000	,	

# n) U.S.-produced substitute:

As to the specific characteristics of TQ 1 there is no substitute.

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# KIND & CO. EDELSTAHLWERK

Requests To Exclude Certain Tool Steel Products From Import Relief Under Section 203 To The TPSC

3.) Concern: TQ F

Information as required by the TPSC, published in the Federal Register / Vol. 66, No. 208 / October 26, 2001

o) Commercial name: TQ F

HTS number: 72 28 40 10

p) Physical characteristics:

Chemical composition (wide range)

С	0,30	0,45
Si	0,10	0,50
Mn	0,20	08,0
Сг	4,50	6,00
Mo	1,50	2,50
V	0,40	1,00

with limited levels of defined trace elements

The detailed analysis is confidential know-how of KIND & Co. Edelstahlwerk.

TQ F is a hot working tool steel for die forging application, newly developed by KIND & CO. Edelstahlwerk for high demands of the forging industry. Specially the adjustment of the trace elements combined with certain requirements on the heat treating and forging processes are resulting in a high level of toughness and high temperature strength combined with a high resistance of thermal shock and acceptable level of wear resistance.

Dimensions: max. 850 mm ø, 800 mm square, flat max. 1.300 x 500 mm

Surface quality; rough or premachined

g) Basis for Exclusion Request

TQ F has not yet been imported to U.S. consumers. Because of growing demands on the properties of forging dies by our U.S. customers, we will offer this steel grade in the near future.

r) Other producers:

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There are no other manufacturers of this grade.

s) Total U.S. annual consumption:

Year		quantity
1996 1997 1998 1999 2000	}	none

# projected:

2001	0 short tons
2002	5 short tons
2003	10 short tons
2004	20 short tons
2005	20 short tons

t) Total U.S. production:

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1996
1997
1998
1999
2000
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u) U.S.-produced substitute:

As to the specific characteristics of TQ F there is no substitute.

Attraction - Krupp Carlach Company



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November 12, 2001

To Whom it May Concern,

This memo is to address issues concerning Kind & Co. die steel as purchased by Krupp Gerlach Automotive, Veedersburg, Indiana. We are a forger of automotive crankshafts.

We have been using the material grade CR7V as supplied by Kind & Co. since 1995. While this is not the only grade we have tested, we have found it to be the superior material.

Although a domestic supplier has supplied their competitive products, these have not been as successful in our application as Kind CR7V. We have not been able to duplicate this material from a domestic source.

As a superior material, we are paying a premium for this die steel. We have determined the additional cost to be justified by the improved productivity achieved using this product.

Sincerely

Bruce W. Pierce

Logistics / Materials Supervisor

Krupp Gerlach Company

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TOTAL P.02

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ALUMINUM GROUP

Paca bodopisian fore and Alfiliated Companies

Pace Industries de Chibadon, S.A. de C.V.

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Dear Sir or Medern:

The Leggett and Pisit Aluminum Group is a large manufacturar of die cast parts serving the furniture, appliance and hi-tech industries

Typically our dies are made from Premium H13 tool steel,

We have recently been experimenting with TQ1 from Kind&CO. We have found expellent results in certain applications with this material.

TQT is twice the normal price of our regular die steet but worth the premium on some of our most demanding electrons.

TQ1 is an innovation by IGnd&GD, and not produced by any correcte mits.

We led that TQ1 is an important part of our plans to improve productivity and lower costs on some of our more difficult manufacturing problems.

**Bobby Welets** 

President & General Manager

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